BRUHAT BENGALURU MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work:	Improvements to Roads, Drains and Construction of culverts in Somanna Garden and surrounding areas in Ward No.11, Byatarayanapura.
Estimated Cost :	Rs. 60.00 Lakhs
Job Code:	011-23-000012
Head of Account :	P-3726 Zonal Public Works - POW Works
Name of Agency:	Sri .Sambashiva, No. 04, 3rd Main Road, Chamundeshwari Layout, Doddabommasandra, Vidyaranyapura (Post), Bengalurur - 560097.
Work order No:	BBMP/EE/BTP/WO/206/2022-23 Dated: 28-03-2023.

Measurements Recarded on : 28-05-2023

Sl No	Description of work	Mesurement				Qty.	Unit	Rate	Amount
		No.	L	B	D				
1	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.								
	Qty as per Premeasurement vide E-MB Page No. 01 to 02 is =					**645.00**	Cum	204.60	**131967.00**
2	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications.								
	Qty as per Premeasurement vide E-MB Page No. 03 is =					**95.17**	Cum	6109.40	**581432.00**
3	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately)								
	Qty as per Premeasurement vide E-MB Page No. 04 to 05 is =					**205.03**	Cum	6893.04	**1413280.00**
4	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. MORTH Specification NO.1600&2200								
	Qty as per Premeasurement vide E-MB Page No. 06 to 07 is =					**12.74**	Tonne	101387.00	**1291670.00**

Sl No	Description of work	Mesurement				Qty.	Unit	Rate	Amount
		No.	L	B	D				
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. Mix 1:2:4 (M15)								
	Ramp for Culvert								
		2	13.00	1.10	0.15	4.29			
		2	11.10	1.10	0.15	3.66			
		2	15.70	1.00	0.15	4.71			
		Total Qty =				**12.66**			
	Total	Qty Ltd to App Qty =				**12.60**	Cum	6468.00	**81497.00**

20/6/23

Assistant Engineer
Ward No. 11, Byatarayanapura

Assistant Executive Engineer
Kodigehalli Sub-Division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Sl No	Description of work	Mesurement No.	L	B	D	Qty.	Unit	Rate	Amount
	Measurements Recarded on : 29.06.2023								
6	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. (Data								
	Covering Slab								
	Canara Bank Layout 12th Main								
	N/S	1	30.00	0.90		27.00			
		1	30.00	0.90		27.00			
		1	18.40	0.90		16.56			
		1	30.00	0.90		27.00			
		1	30.00	0.90		27.00			
		1	1.80	0.90		1.62			
	S/S								
		1	30.00	0.90		27.00			
		1	5.40	0.90		4.86			
		1	30.00	0.90		27.00			
		1	2.20	0.90		1.98			
		1	10.00	0.90		9.00			
		1	12.70	0.90		11.43			
		1	30.00	0.90		27.00			
		1	3.50	0.90		3.15			
	4th Cross G P Rajarathnam Road								
	E/S	1	30.00	0.90		27.00			
		1	14.20	0.90		12.78			
		1	11.30	0.90		10.17			
		1	30.00	0.90		27.00			
		1	14.60	0.90		13.14			
		1	10.20	0.90		9.18			
	3rd Cross Road								
		1	30.00	0.90		27.00			
		1	17.20	0.90		15.48			
	2nd Main Road								
		1	30.00	0.90		27.00			
		1	30.00	0.90		27.00			
		1	30.00	0.90		27.00			
		1	30.00	0.90		27.00			
		1	4.30	0.90		3.87			
	1st Cross Road								
	E/S	1	18.00	0.90		16.20			
		1	21.00	0.90		18.90			
		1	30.00	0.90		27.00			
		1	15.00	0.90		13.50			
	W/S								
		1	28.20	0.90		25.38			
		1	15.00	0.90		13.50			
		1	13.80	0.90		12.42			
	Deduction of BS Slabs					**618.12**			
		1	12.50	0.90		11.25			
		1	12.00	0.90		10.80			
		1	7.70	0.90		6.93			
		1	9.00	0.90		8.10			

Assistant Executive Engineer
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BBMP, Bangalore

37.08

Sl No	Description of work	Mesurement				Qty.	Unit	Rate	Amount
		No.	L	B	D				
		1	12.60	0.90		11.34			
		1	3.00	0.90		2.70			
		1	9.60	0.90		8.64			
		1	3.00	0.90		2.70			
		1	8.00	0.90		7.20			
		1	15.90	0.90		14.31			
		1	4.40	0.90		3.96			
						87.93			
		Total Qty =				**530.19**			
		Qty Ltd to App Qty =				**523.80**	Sqm	2337.00	**1224121.00**

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Sl No	Description of work	Mesurement No.	L	B	D	Qty.	Unit	Rate	Amount
	Measurements Recarded on : 26-06-2023								
7	Providing and Fixing pre cast Covering Slab 250mm thick made out of CC 1:2:4 and jelly 25mm Down size with steel reinforcement including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. As per Engineer incharge								
	For Culvert								
	5th Cross Road	1	12.60	1.20		15.12			
		1	11.00	1.20		13.20			
		1	15.60	1.20		18.72			
			Total Qty =			**47.04**			
			Qty Ltd to App Qty =			**42.00**	Sqm	5418.00	**227556.00**
8	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3)								
	Qty Vide 90% of Item No- (1)					574.05			
	Total					**574.05**	Cum	81.40	**46728.00**
9	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km								
	Qty frm Item No-14					574.05			
	Density of Sand/Debris i.e 1.28 Tonne/Cum		574.05	1.28		734.78			
	Cost of Haulage Excluding Loading and Unloading on Surface Road to a distance of 9.80 Kms		734.78	9.80		7200.88			
	Total					**7200.88**	T.Km	12.00	**86411.00**
					5084000.00			Grand Total =	**5084662.00**
					915120.00	GST Charges (18% of Executed cost) =			**915239.00**
					5999120.00			Total Amount =	**5999901.00**

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